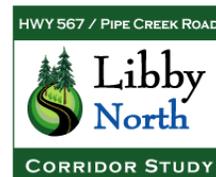


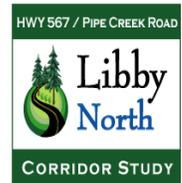


Montana Department of Transportation



Appendix F

Cost Estimates



Summary of Costs

	Total - 2006 Dollars
Option 1 - Full Reconstruction	\$ 24,727,032
Option 2- Rehab with widening to 24'	\$ 10,165,987
Option 3 - Rehab with no widening	\$ 5,698,042
Option 4 - Spot Improvements	\$ 187,501
Option 5 - Snow Storage Widening	\$ 450,528
Option 6 - Recommended in Corridor Study	\$ 15,860,000



Summary of Costs

	Roadway - 2006 Dollars	Right of Way - 2006 Dollars	Total - 2006 Dollars	Total - 2012 Dollars	Total Cost including 12% Indirect Cost Recovery - 2012 Dollars
Option 1 - Full Reconstruction	\$ 22,711,542	\$ 2,015,490	\$ 24,727,032		
Option 2- Rehab with widening to 24'	\$ 9,832,487	\$ 333,500	\$ 10,165,987		
Option 3 - Rehab with no widening	\$ 5,604,001	\$ 94,041	\$ 5,698,042		
Option 4 - Spot Improvements	\$ 187,501	\$ -	\$ 187,501		
Option 5 - Snow Storage Widening	\$ 444,778	\$ 5,750	\$ 450,528		
Option 6 - Corridor Plan	\$ 15,640,000	\$ 218,500	\$ 15,860,000	18,940,000	21,210,000
Corridor Plan Re-align RP 8	\$ 890,000	\$ 6,000	\$ 900,000	1,070,000	1,200,000
Corridor Plan Re-align RP 11	\$ 1,110,000	\$ 6,000	\$ 1,120,000	1,340,000	1,500,000
Corridor Plan Segment 1 - RP 7 to RP 12	\$ 4,760,000	\$ 52,000	\$ 4,810,000	5,740,000	6,430,000
Corridor Plan Segment 2 - RP 12 to RP 17	\$ 4,650,000	\$ 161,000	\$ 4,810,000	5,740,000	6,430,000
Corridor Plan Segment 3 - RP 17 to RP 20.1	\$ 6,370,000	\$ 6,000	\$ 6,380,000	7,620,000	8,530,000

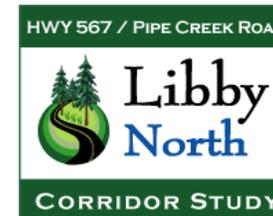


Alternative Name: Pipe Creek Road - Option 1 Full Reconstruct
RP 6.1 - RP 20.1

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes
Demolition and Removal	1	Clearing and Grubbing	149	Acre	\$3,500.00	\$521,500	
	2	Demolition of Buildings	1	Each	\$5,000.00	\$5,000	
	3	Demolition of Bridges	1	Each	\$30,000.00	\$30,000	
	4	Demolition and Removal Contingency				\$83,475	15%
Earthwork and Grading	5	Unclassified Excavation	600,000	yd3	\$10.00	\$6,000,000	From Model
	6	Embankment in place	239,000	yd3	\$10.00	\$0	Pay for difference between cut and fill only (using 60% of cut)
	7	Earthwork and Grading Contingency				\$900,000	15%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	1	Lump	\$456,780.00	\$456,780	Assumed replacing all crossing structures
	9	Drainage Contingency				\$45,678	10%
Pavement (Mainline, Ramps, and CDs)	10	Pavement and Base	73,920	ft	\$43.24	\$3,196,301	Assume 3.6" superpave & 8" crushed aggregate
	11	Paving Contingency				\$479,445	15%
Structures	12	Bridge (2nd Level Concrete)	1,312	ft ²	\$110.00	\$144,320	
	13	Retaining Walls	38,610	ft ²	\$70.00	\$2,702,700	
	14	Structure Contingency				\$427,053	15%
General Utility Adjustments/Relocations	15	Adjust / Relocate Utility	1	Lump	\$300,000.00	\$300,000	Assumed to be 5% of earthwork and grading
	16	General Utility Adjustment / Relocation Contingency				\$45,000	15%
	17	Signing	1	Lump	\$40,000.00	\$40,000	
	18	Striping	73,920	ft	\$1.83	\$135,274	assume 4-4" stripes
	19	Signing/Striping Contingency				\$26,291	15%
	20	Guardrail	16,600	ft	\$20.00	\$332,000	
	21	Landscaping	109	Acre	\$4,050.00	\$441,450	area between edge of pavement and cut/fill line
	22	Fencing	138,619	ft	\$2.60	\$360,409	
	23	General Other Contingency				\$113,386	10%

Libby Corridor Project
 MDT Project # HPP-TI-STP-0068(42)26
 Build options cost estimate
 DRAFT 04/06/07

Developed: DRN
 Checked: JC



Alternative Name: Pipe Creek Road - Option 1 Full Reconstruct
 RP 6.1 - RP 20.1

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes
	29				Subtotal	\$16,786,062	
	30			10%	Mobilization	\$1,678,606	
	31			2.5%	Traffic Control	\$419,652	
	32	Traffic Control Contingency				\$41,965	10%
	33				Subtotal	\$18,926,285	
	34			10%	Design Egr.	\$1,892,628	
	35			10%	Const. Egr.	\$1,892,628	
SUBTOTAL	36				Subtotal	\$22,711,542	
Right-of-Way	37	Administration	50	Parcel	\$5,000	\$250,000	
	38	USFS	180	Acre	\$0	\$0	
	39	Relocation (out buildings)	1	Each	\$20,000	\$20,000	
	40	ROW From Private Entities	15	Acre	\$100,000	\$1,482,600	Acquisition
	41	R/W Contingency				\$262,890	15%
	42	Total Roadway Elements--2006 USD				\$24,727,032	



Alternative Name: Pipe Creek Road - Option 2-24' Widening Rehab
 RP 6.1 - RP 20.1

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes	
Demolition and Removal	1	Clearing and Grubbing	78	Acre	\$3,500.00	\$273,000		
	2	Demolition of Buildings	0	Each	\$5,000.00	\$0		
	3	Demolition of Bridges	1	Each	\$30,000.00	\$30,000		
	4	Demolition and Removal Contingency					\$45,450	15%
Earthwork and Grading	5	Unclassified Excavation	130,796	yd3	\$10.00	\$1,307,960	From Model	
	6	Embankment in place	115,449	yd3	\$10.00	\$369,714	Pay for difference between cut and fill only (using 60% of cut)	
	7	Earthwork and Grading Contingency					\$251,651	15%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	1	Lump	\$456,780.00	\$456,780	Assumed replacing all crossing structures	
	9	Drainage Contingency					\$45,678	10%
Pavement (Mainline, Ramps, and CDs)	10	Pavement and Base	73,920	ft	\$29.79	\$2,202,077	Assume 3.6" superpave & 8" crushed aggregate	
	11	Paving Contingency					\$330,312	15%
Structures	12	Bridge (2nd Level Concrete)	1	Each	\$30,000.00	\$30,000	cost of fixes identified in UDFS inspection report	
	13	Retaining Walls	12,955	ft ²	\$70.00	\$906,850		
	14	Structure Contingency					\$140,528	15%
General Utility Adjustments/Relocations	15	Adjust / Relocate Utility	1	Lump	\$83,883.70	\$83,884	Assumed to be 5% of earthwork and grading	
	16	General Utility Adjustment / Relocation Contingency					\$12,583	15%
	17	Signing	1	Lump	\$40,000.00	\$40,000		
	18	Striping	73,920	ft	\$0.92	\$68,006	Assume 1-double yellow center line	
	19	Signing/Striping Contingency					\$16,201	15%
	20	Guardrail	14,046	ft	\$20.00	\$280,920		
	21	Landscaping	78	Acre	\$4,050.00	\$315,900	area between edge of pavement and cut/fill line	
	22	Fencing	0	ft	\$2.60	\$0		
	23	General Other Contingency					\$59,682	10%
	29	Subtotal					\$7,267,175	
	30	10% Mobilization					\$726,717	
	31	2.5% Traffic Control					\$181,679	
	32	Traffic Control Contingency					\$18,168	10%
	33	Subtotal					\$8,193,739	
	34	10% Design Egr.					\$819,374	
	35	10% Const. Egr.					\$819,374	
SUBTOTAL	36	Subtotal					\$9,832,487	
Right-of-Way	37	Administration	25	Parcel	\$5,000	\$125,000		
	38	USFS	71	Acre	\$0	\$0		
	39	Relocation (out buildings)	0	Each	\$20,000	\$0		
	40	ROW From Private Entities	7	Acre	\$25,000	\$165,000	Easement	
	41	R/W Contingency					\$43,500	15%
	42	Total Roadway Elements--2006 USD					\$10,165,987	



Alternative Name: Pipe Creek Road - Option 3 Rehab with no widening
 Assume 3" pavement overlay, shallowing out fill slopes not by pipe creek, install guardrail as necessary, no widening

RP 6.1 - RP 20.1

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes
Demolition and Removal	1	Clearing and Grubbing	15	Acre	\$3,500.00	\$51,891	
	2	Demolition of Buildings	0	Each	\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each	\$30,000.00	\$0	
	4	Demolition and Removal Contingency				\$7,784	15%
Earthwork and Grading	5	Unclassified Excavation	0	yd3	\$10.00	\$0	From Model
	6	Embankment in Place	52,657	yd3	\$10.00	\$526,565	
	7	Earthwork and Grading Contingency				\$78,985	15%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	0	Lump	\$456,780.00	\$0	
	9	Drainage Contingency				\$0	10%
Pavement (Mainline, Ramps, and CDs)	10	Pavement and Base	73,920	ft	\$26.30	\$1,944,096	Assumes 3.6" superpave overlay
	11	Paving Contingency				\$291,614	15%
Structures	12	Bridge (2nd Level Concrete)	0	ft ²	\$110.00	\$0	
	13	Retaining Walls	8,100	ft ²	\$70.00	\$567,000	
	14	Structure Contingency				\$85,050	15%
General Utility Adjustments/Relocations	15	Adjust / Relocate Utility	0	Lump	\$0.00	\$0	Assumed to be 5% of earthwork and grading
	16	General Utility Adjustment / Relocation Contingency				\$0	15%
	17	Signing	1	Lump	\$50,000.00	\$50,000	
	18	Striping	73,920	ft	\$0.92	\$67,637	Assume 1-double yellow center line
	19	Signing/Striping Contingency				\$17,646	15%
	20	Guardrail	16,574	ft	\$20.00	\$331,477	
	21	Landscaping	14	Acre	\$4,050.00	\$56,042	area between edge of pavement and cut/fill line
	22	Fencing	0	ft	\$2.60	\$0	
	23	General Other Contingency				\$38,752	10%
	29	Subtotal				\$4,114,538	
	30	10% Mobilization				\$411,454	
	31	3.5% Traffic Control				\$144,009	
	32	Traffic Control Contingency				\$14,401	10%
	33	Subtotal				\$4,670,001	
	34	10% Design Egr.				\$467,000	
	35	10% Const. Egr.				\$467,000	
SUBTOTAL	36	Subtotal				\$5,604,001	
Right-of-Way	37	Administration	4	Parcel	\$5,000	\$20,000	
	40	USFS-easement	12	Acre	\$0	\$0	
	42	easement From Private Entities	2	Acre	\$25,000	\$61,775	Easement
	45	R/W Contingency				\$12,266	15%
	46	Total Roadway Elements--2006 USD				\$5,698,042	



Alternative Name: **Pipe Creek Road - Option 4 Spot Improvements
 RP 6.1 - RP 20.1**

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes	
Demolition and Removal	1	Clearing and Grubbing	0	Acre	\$3,500.00	\$0		
	2	Demolition of Buildings	0	Each	\$5,000.00	\$0		
	3	Demolition of Bridges	0	Each	\$30,000.00	\$0		
	4	Demolition and Removal Contingency					\$0	15%
Earthwork and Grading	5	Unclassified Excavation	0	yd3	\$10.00	\$0	From Model	
	6	Embankment in Place	0	yd3	\$10.00	\$0	Pay for difference between cut and fill only (using 60% of cut)	
	7	Earthwork and Grading Contingency					\$0	15%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	0	Lump	\$452,780.00	\$0	Assumed replacing all crossing structures	
	9	Drainage Contingency					\$0	10%
Pavement (Mainline, Ramps, and CDs)	10	Pavement and Base	0	ft	\$47.51	\$0		
	11	Paving Contingency					\$0	15%
Structures	12	Bridge (2nd Level Concrete)	0	ft ²	\$110.00	\$0		
	13	Retaining Walls	0	ft ²	\$70.00	\$0		
	14	Structure Contingency					\$0	15%
General Utility Adjustments/Relocations	15	Adjust / Relocate Utility	0	Lump	\$0.00	\$0	Assumed to be 5% of earthwork and grading	
	16	General Utility Adjustment / Relocation Contingency					\$0	15%
	17	Signing	1	Lump	\$50,000.00	\$50,000		
	18	Striping	73,920	ft	\$0.92	\$67,637	Assume 1-double yellow center line	
	19	Signing/Striping Contingency					\$17,646	15%
	20	Guardrail	0	ft	\$20.00	\$0		
	21	Landscaping	0	Acre	\$4,050.00	\$0		
	22	Fencing	0	ft	\$2.60	\$0		
	23	General Other Contingency					\$0	10%
	29	Subtotal					\$135,282	
	30	10% Mobilization					\$13,528	
	31	5% Traffic Control					\$6,764	
	32	Traffic Control Contingency					\$676	10%
	33	Subtotal					\$156,251	
	34	10% Design Egr.					\$15,625	
	35	10% Const. Egr.					\$15,625	
SUBTOTAL	36	Subtotal					\$187,501	
Right-of-Way	37	Administration	0	Parcel	\$5,000	\$0		
	40	USFS	0	Acres	\$25,000	\$0		
	42	ROW From Private Entities	0	Acres	\$25,000	\$0	Easement	
	45	R/W Contingency					\$0	15%
	46	Total Roadway Elements--2006 USD					\$187,501	



Alternative Name: Pipe Creek Road - Option 5 Snow Storage Widening
 RP 6.1 - RP 20.1

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes
Demolition and Removal	1	Clearing and Grubbing	7	Acre	\$3,500.00	\$23,100	
	2	Demolition of Buildings	0	Each	\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each	\$30,000.00	\$0	
	4	Demolition and Removal Contingency				\$3,465	15%
Earthwork and Grading	5	Unclassified Excavation	4100	yd3	\$10.00	\$41,000	RP 10.9 - 11.1 - Left
	5	Unclassified Excavation	900	yd3	\$10.00	\$9,000	RP 14.32 - RP 14.35 - Right
	5	Unclassified Excavation	900	yd3	\$10.00	\$9,000	RP 14.6 - 14.7 - Right
	5	Unclassified Excavation	400	yd3	\$10.00	\$4,000	RP 15.1 - RP 15.2 - Right
	5	Unclassified Excavation	650	yd3	\$10.00	\$6,500	RP 15.3 - RP 15.4 - Right
	5	Unclassified Excavation	1300	yd3	\$10.00	\$13,000	RP 15.41 - RP 15.43 - Right
	5	Unclassified Excavation	1725	yd3	\$10.00	\$17,250	RP 15.46 - RP 15.54 - Right
	5	Unclassified Excavation	2900	yd3	\$10.00	\$29,000	RP 15.9 - RP 16.1 - Right
	5	Unclassified Excavation	200	yd3	\$10.00	\$2,000	RP 16.15 - RP 16.17 - Right
	5	Unclassified Excavation	500	yd3	\$10.00	\$5,000	RP 16.7 - RP 16.8 - Left & Right
	5	Unclassified Excavation	5200	yd3	\$10.00	\$52,000	RP 17.9 - 18.2 - Right
	5	Unclassified Excavation	620	yd3	\$10.00	\$6,200	RP 18.32 - RP 18.36 - Left & Right
	5	Unclassified Excavation	150	yd3	\$10.00	\$1,500	RP 18.69 - RP 18.7 - Right
	5	Unclassified Excavation	250	yd3	\$10.00	\$2,500	RP 18.6 - RP 18.7 - Right
	5	Unclassified Excavation	5800	yd3	\$10.00	\$58,000	RP 18.8 - RP 20.0 - Left
	5	Unclassified Excavation - Total	25,595	yd3	\$10.00	\$255,950	From Model
	6	Embankment in Place	0	yd3	\$10.00	\$0	Pay for difference between cut and fill only (using 60% of cut)
		7	Earthwork and Grading Contingency				\$38,393
General Drainage	8	Pipe Culverts, Catch Basins, etc.	0	Lump	\$452,780.00	\$0	Assumed replacing all crossing structures
	9	Drainage Contingency				\$0	10%
Pavement (Mainline, Ramps, and CD's)	10	Pavement and Base	0	ft	\$47.51	\$0	
	11	Paving Contingency				\$0	15%
Structures	12	Bridge (2nd Level Concrete)	0	ft ²	\$110.00	\$0	
	13	Retaining Walls	0	ft ²	\$70.00	\$0	
	14	Structure Contingency				\$0	15%
General Utility Adjustments/Relocations	15	Adjust / Relocate Utility	0	Lump	\$12,797.50	\$0	Assumed to be 5% of earthwork and grading
	16	General Utility Adjustment / Relocation Contingency				\$0	15%
	17	Signing	0	Lump	\$50,000.00	\$0	
	18	Striping	0	ft	\$0.92	\$0	Assume 1-double yellow center line
	19	Signing/Striping Contingency				\$0	15%
	20	Guardrail	0	ft	\$20.00	\$0	
	21	Landscaping	0	Acre	\$4,050.00	\$0	
	22	Fencing	0	ft	\$2.60	\$0	
	23	General Other Contingency				\$0	10%
	29	Subtotal				\$320,908	
	30	10% Mobilization				\$32,091	
	31	5% Traffic Control				\$16,045	
	32	Traffic Control Contingency				\$1,605	10%
	33	Subtotal				\$370,648	
	34	10% Design Egr.				\$37,065	
	35	10% Const. Egr.				\$37,065	
SUBTOTAL	36	Subtotal				\$444,778	
Right-of-Way	37	Administration	1	Parcel	\$5,000	\$5,000	
	40	USFS	7	Acres	\$0	\$0	
	42	ROW From Private Entities	0	Acres	\$25,000	\$0	Easement
	45	R/W Contingency				\$750	15%
	46	Total Roadway Elements--2006 USD				\$450,528	



Alternative Name: Pipe Creek Road - Corridor Plan
 RP 7 - RP 20.1

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes	
Demolition and Removal	1	Clearing and Grubbing	72	Acre		\$3,500.00	\$252,000	
	2	Demolition of Buildings	0	Each		\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each		\$30,000.00	\$0	
	4	Demolition and Removal Contingency						\$37,800 15%
Earthwork and Grading	5	Unclassified Excavation	222,609	yd3		\$10.00	\$2,226,090 From Model	
	6	Embankment in place	87,863	yd3		\$10.00	\$0 Pay for difference between cut and fill only (using 60% of cut)	
	7	Earthwork and Grading Contingency						\$556,523 25%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	1	Lump		\$456,781.00	\$456,781 Assumed replacing all crossing structures	
	9	Drainage Contingency						\$91,356 20%
Pavement (Reconstruct)	10	Pavement and Base	2,000	ft		\$40.68	\$81,360 Assume 3.6" superpave & 8" crushed aggregate	
Pavement (24' Widening)	11	Pavement and Base	50,800	ft		\$29.79	\$1,513,332 Assume 3.6" superpave & 8" crushed aggregate	
Pavement (22' Widening)	12	Pavement and Base	16,368	ft		\$26.74	\$437,680 Assume 3.6" superpave & 8" crushed aggregate	
Pavement Rehabilitation	13	FDR w/ Foam mix	67,168	ft		\$21.11	\$1,417,916 Assume FDR w/ foam mix w 3% PG 58-28 PG binder and 1% cement	
	14	Paving Contingency						\$508,093 25%
Structures	15	Bridge (2nd Level Concrete)	1	Each		\$30,000.00	\$30,000 cost of fixes identified in UDFS inspection report	
	16	Retaining Walls	38,472	ft ²		\$70.00	\$2,693,040	
					Structure Contingency			\$544,608 20%
General Utility Adjustments/Relocations	18	Adjust / Relocate Utility	1	Lump		\$111,304.50	\$111,305 Assumed to be 5% of earthwork and grading	
	19	General Utility Adjustment / Relocation Contingency						\$16,696 15%
	20	Signing	1	Lump		\$40,000.00	\$40,000	
	21	Striping	69,168	ft		\$1.00	\$69,168 Assume 1-double yellow center line	
					Signing/Striping Contingency			\$16,375 15%
	23	Guardrail	4,804	ft		\$20.00	\$96,080	
	24	Landscaping	72	Acre		\$4,050.00	\$291,600 area between edge of pavement and cut/fill line	
	25	Fencing	0	ft		\$2.60	\$0	
					General Other Contingency			\$58,152 15%
					Subtotal			\$11,545,955
					10%	Mobilization	\$1,154,595	
					2.5%	Traffic Control	\$288,649	
					Traffic Control Contingency			\$43,297 15%
					Subtotal			\$13,032,497
					10%	Design Egr.	\$1,303,250	
					10%	Const. Egr.	\$1,303,250	
SUBTOTAL					Subtotal		\$15,638,996	
Right-of-Way	40	Administration	18	Parcel		\$5,000	\$90,000	
	41	USFS	100	Acre		\$0	\$0	
	42	Relocation (out buildings)	0	Each		\$20,000	\$0	
	43	ROW From Private Entities	4	Acre		\$25,000	\$100,000 Easement	
					R/W Contingency			\$28,500 15%
					Total Roadway Elements--2006 USD			\$15,857,496



Alternative Name: Pipe Creek Road - Corridor Plan
 RP 8 Re-alignment

Length of Re-Alignment = 1000 ft

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes	
Demolition and Removal	1	Clearing and Grubbing	5	Acre		\$3,500.00	\$17,850	
	2	Demolition of Buildings	0	Each		\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each		\$30,000.00	\$0	
	4	Demolition and Removal Contingency						\$2,678 15%
Earthwork and Grading	5	Unclassified Excavation	3,500	yd3		\$10.00	\$35,000 From Model	
	6	Embankment in place	0	yd3		\$10.00	\$0 Pay for difference between cut and fill only (using 60% of cut)	
	7	Earthwork and Grading Contingency						\$8,750 25%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	0	Lump		\$456,780.00	\$235,434 Assumed replacing all crossing structures	
	9	Drainage Contingency						\$47,087 20%
Pavement (Reconstruct)	10	Pavement and Base	1,000	ft		\$40.68	\$40,680 Assume 3.6" superpave & 8" crushed aggregate	
Pavement (24' Widening)	11	Pavement and Base	0	ft		\$29.79	\$0 Assume 3.6" superpave & 8" crushed aggregate	
Pavement (22' Widening)	12	Pavement and Base	0	ft		\$26.74	\$0 Assume 3.6" superpave & 8" crushed aggregate	
	13	Paving Contingency						\$10,170 25%
Structures	14	Bridge (2nd Level Concrete)	0	ft ²		\$110.00	\$0	
	15	Retaining Walls	1,614	ft ²		\$70.00	\$112,980	
	16	Structure Contingency						\$22,596 20%
General Utility Adjustments/Relocations	17	Adjust / Relocate Utility	1	Lump		\$1,750.00	\$1,750 Assumed to be 5% of earthwork and grading	
	18	General Utility Adjustment / Relocation Contingency						\$263 15%
	19	Signing	1	Lump		\$2,000.00	\$2,000	
	20	Striping	1,000	ft		\$1.00	\$1,000 Assume 1-double yellow center line	
	21	Signing/Striping Contingency						\$450 15%
	22	Guardrail	300	ft		\$20.00	\$6,000	
	23	Landscaping	5	Acre		\$4,050.00	\$18,225 area between edge of pavement and cut/fill line	
	24	Fencing	0	ft		\$2.60	\$0	
	25	General Other Contingency						\$3,634 15%
	31	Subtotal						\$566,546
	32	20% Mobilization						\$113,309
	33	10.0% Traffic Control						\$56,855
	34	Traffic Control Contingency						\$8,498 15%
	35	Subtotal						\$745,007
	36	10% Design Egr.						\$74,501
	37	10% Const. Egr.						\$74,501
SUBTOTAL	38	Subtotal						\$894,009
Right-of-Way	39	Administration	1	Parcel		\$5,000	\$5,000	
	40	USFS	5	Acre		\$0	\$0	
	41	Relocation (out buildings)	0	Each		\$20,000	\$0	
	42	ROW From Private Entities	0	Acre		\$25,000	\$0 Easement	
	43	R/W Contingency						\$750 15%
	44	Total Roadway Elements--2006 USD						\$899,759



Alternative Name: Pipe Creek Road - Corridor Plan
 RP 11 Re-alignment

Length of Re-Alignment = 1000 ft

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes	
Demolition and Removal	1	Clearing and Grubbing	4	Acre	\$3,500.00	\$15,400		
	2	Demolition of Buildings	0	Each	\$5,000.00	\$0		
	3	Demolition of Bridges	0	Each	\$30,000.00	\$0		
	4	Demolition and Removal Contingency					\$2,310	15%
Earthwork and Grading	5	Unclassified Excavation	14,640	yd3	\$10.00	\$146,400	From Model	
	6	Embankment in place	260	yd3	\$10.00	\$0	Pay for difference between cut and fill only (using 60% of cut)	
	7	Earthwork and Grading Contingency					\$36,600	25%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	0	Lump	\$456,780.00	\$235,434	Assumed replacing all crossing structures	
	9	Drainage Contingency					\$47,087	20%
Pavement (Reconstruct)	10	Pavement and Base	1,000	ft	\$40.68	\$40,680	Assume 3.6" superpave & 8" crushed aggregate	
Pavement (24' Widening)	11	Pavement and Base	0	ft	\$29.79	\$0	Assume 3.6" superpave & 8" crushed aggregate	
Pavement (22' Widening)	12	Pavement and Base	0	ft	\$26.74	\$0	Assume 3.6" superpave & 8" crushed aggregate	
	13	Paving Contingency					\$10,170	25%
Structures	14	Bridge (2nd Level Concrete)	0	ft ²	\$110.00	\$0		
	15	Retaining Walls	1,614	ft ²	\$70.00	\$112,980		
	16	Structure Contingency					\$22,596	20%
General Utility Adjustments/Relocations	17	Adjust / Relocate Utility	0	Lump	\$7,320.00	\$0	Assumed to be 5% of earthwork and grading	
	18	General Utility Adjustment / Relocation Contingency					\$0	15%
	19	Signing	1	Lump	\$2,000.00	\$2,000		
	20	Striping	1,000	ft	\$1.00	\$1,000	Assume 1-double yellow center line	
	21	Signing/Striping Contingency					\$450	15%
	22	Guardrail	500	ft	\$20.00	\$10,000		
	23	Landscaping	4	Acre	\$4,050.00	\$14,175	area between edge of pavement and cut/fill line	
	24	Fencing	0	ft	\$2.60	\$0		
	25	General Other Contingency					\$3,626	15%
	31	Subtotal					\$700,908	
	32	Mobilization					\$140,182	
	33	Traffic Control					\$70,091	
	34	Traffic Control Contingency					\$10,514	15%
	35	Subtotal					\$921,694	
	36	Design Egr.					\$92,169	
	37	Const. Egr.					\$92,169	
SUBTOTAL	38	Subtotal					\$1,106,033	
Right-of-Way	39	Administration	1	Parcel	\$5,000	\$5,000		
	40	USFS	4	Acre	\$0	\$0		
	41	Relocation (out buildings)	0	Each	\$20,000	\$0		
	42	ROW From Private Entities	0	Acre	\$25,000	\$0	Easement	
	43	R/W Contingency					\$750	15%
	44	Total Roadway Elements--2006 USD					\$1,111,783	



Alternative Name: Pipe Creek Road - Corridor Plan Segment 1
 RP 7 - RP 12
 Length of Re-Alignment = 26400 ft

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes	
Demolition and Removal	1	Clearing and Grubbing	27	Acre		\$3,500.00	\$94,500	
	2	Demolition of Buildings	0	Each		\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each		\$30,000.00	\$0	
	4	Demolition and Removal Contingency					\$14,175	15%
Earthwork and Grading	5	Unclassified Excavation	91,361	yd3		\$10.00	\$913,610	From Model
	6	Embankment in place	22,254	yd3		\$10.00	\$0	Pay for difference between cut and fill only (using 60% of cut)
	7	Earthwork and Grading Contingency					\$228,403	25%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	1	Lump		\$108,918.00	\$108,918	Assumed replacing all crossing structures Except Bridge and Culvert Arch over Pipe Creek at RP 12 +/-
	9	Drainage Contingency					\$21,784	20%
Pavement (Reconstruct)	10	Pavement and Base	2,000	ft		\$40.68	\$81,360	Assume 3.6" superpave & 8" crushed aggregate
Pavement (24' Widening)	11	Pavement and Base	24,400	ft		\$29.79	\$726,876	Assume 3.6" superpave & 8" crushed aggregate
Pavement (22' Widening)	12	Pavement and Base	0	ft		\$26.74	\$0	Assume 3.6" superpave & 8" crushed aggregate
Pavement Rehabilitation	13	FDR w/ Foam mix	24,400	ft		\$21.11	\$515,084	Assume FDR w/ foam mix w 3% PG 58-28 PG binder and 1% cement
	13	Paving Contingency					\$202,059	25%
Structures	14	Bridge (2nd Level Concrete)	1	Each		\$30,000.00	\$30,000	cost of fixes identified in UDFS inspection report
	15	Retaining Walls	3,867	ft ²		\$70.00	\$270,690	
	16	Structure Contingency					\$60,138	20%
General Utility Adjustments/Relocations	17	Adjust / Relocate Utility	1	Lump		\$42,296.00	\$42,296	Assumed percentage of overall Corridor plan Utility costs (38%)
	18	General Utility Adjustment / Relocation Contingency					\$6,344	15%
	19	Signing	1	Lump		\$15,380.00	\$15,380	
	20	Striping	26,400	ft		\$1.00	\$26,400	Assume 1-double yellow center line-6" wide
	21	Signing/Striping Contingency					\$6,267	15%
	22	Guardrail	1,000	ft		\$20.00	\$20,000	
	23	Landscaping	27	Acre		\$4,050.00	\$109,350	area between edge of pavement and cut/fill line
	24	Fencing	0	ft		\$2.60	\$0	
	25	General Other Contingency					\$19,403	15%
	31	Subtotal					\$3,513,036	
	32			10%	Mobilization	\$351,304		
	33			2.5%	Traffic Control	\$87,826		
	34	Traffic Control Contingency					\$13,174	15%
	35	Subtotal					\$3,965,339	
	36			10%	Design Egr.	\$396,534		
	37			10%	Const. Egr.	\$396,534		
SUBTOTAL	38	Subtotal					\$4,758,407	
Right-of-Way	39	Administration	4	Parcel		\$5,000	\$20,000	
	40	USFS	38	Acre		\$0	\$0	
	41	Relocation (out buildings)	0	Each		\$20,000	\$0	
	42	ROW From Private Entities	1	Acre		\$25,000	\$25,000	Easement
	43	R/W Contingency					\$6,750	15%
	44	Total Roadway Elements--2006 USD					\$4,810,157	



Alternative Name: Pipe Creek Road - Corridor Plan Segment 2
 RP 12 - RP 17
 Length of Re-Alignment = 26400 ft

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes	
Demolition and Removal	1	Clearing and Grubbing	33	Acre		\$3,500.00	\$115,500	
	2	Demolition of Buildings	0	Each		\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each		\$30,000.00	\$0	
	4	Demolition and Removal Contingency						\$17,325 15%
Earthwork and Grading	5	Unclassified Excavation	77,148	yd3		\$10.00	\$771,480 From Model	
	6	Embankment in place	54,144	yd3		\$10.00	\$78,552 Pay for difference between cut and fill only (using 60% of cut)	
	7	Earthwork and Grading Contingency						\$212,508 25%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	1	Lump		\$90,801.00	\$90,801 Assumed replacing all crossing structures Except Bridge and Culvert Arch over Pipe Creek at RP 12 +/-	
	9	Drainage Contingency						\$18,160 20%
Pavement (Reconstruct)	10	Pavement and Base	0	ft		\$40.68	\$0 Assume 3.6" superpave & 8" crushed aggregate	
Pavement (24' Widening)	11	Pavement and Base	26,400	ft		\$29.79	\$786,456 Assume 3.6" superpave & 8" crushed aggregate	
Pavement (22' Widening)	12	Pavement and Base	0	ft		\$26.74	\$0 Assume 3.6" superpave & 8" crushed aggregate	
Pavement Rehabilitation	13	FDR w/ Foam mix	26,400	ft		\$21.11	\$557,304 Assume FDR w/ foam mix w 3% PG 58-28 PG binder and 1% cement	
	14	Paving Contingency						\$196,614 25%
Structures	15	Bridge (2nd Level Concrete)	0	Each		\$30,000.00	\$0	
	16	Retaining Walls	3,562	ft ²		\$70.00	\$249,340	
	17	Structure Contingency						\$49,868 20%
General Utility Adjustments/Relocations	18	Adjust / Relocate Utility	1	Lump		\$42,296.00	\$42,296 Assumed percentage of overall Corridor plan Utility costs (38%)	
	19	General Utility Adjustment / Relocation Contingency						\$6,344 15%
	20	Signing	1	Lump		\$15,380.00	\$15,380	
	21	Striping	26,400	ft		\$1.00	\$26,400 Assume 1-double yellow center line-6" wide	
	22	Signing/Striping Contingency						\$6,267 15%
	23	Guardrail	1,600	ft		\$20.00	\$32,000	
	24	Landscaping	33	Acre		\$4,050.00	\$133,650 area between edge of pavement and cut/fill line	
	25	Fencing	0	ft		\$2.60	\$0	
	26	General Other Contingency						\$24,848 15%
	32	Subtotal						\$3,431,093
	33	10% Mobilization						\$343,109
	34	2.5% Traffic Control						\$85,777
	35	Traffic Control Contingency						\$12,867 15%
	36	Subtotal						\$3,872,846
	37	10% Design Egr.						\$387,285
	38	10% Const. Egr.						\$387,285
SUBTOTAL	39	Subtotal						\$4,647,416
Right-of-Way	40	Administration	13	Parcel		\$5,000	\$65,000	
	41	USFS	44	Acre		\$0	\$0	
	42	Relocation (out buildings)	0	Each		\$20,000	\$0	
	43	ROW From Private Entities	3	Acre		\$25,000	\$75,000 Easement	
	44	R/W Contingency						\$21,000 15%
	45	Total Roadway Elements--2006 USD						\$4,808,416



Alternative Name: Pipe Creek Road - Corridor Plan Segment 3
 RP 17 - RP 20.1
 Length of Re-Alignment = 16368 ft

Category	Line Number ¹	Item Description	Quantity	Units	Unit Cost	Extended Cost	Notes	
Demolition and Removal	1	Clearing and Grubbing	12	Acre		\$3,500.00	\$42,000	
	2	Demolition of Buildings	0	Each		\$5,000.00	\$0	
	3	Demolition of Bridges	0	Each		\$30,000.00	\$0	
	4	Demolition and Removal Contingency					\$6,300	15%
Earthwork and Grading	5	Unclassified Excavation	54,100	yd3		\$10.00	\$541,000	From Model
	6	Embankment in place	11,465	yd3		\$10.00	\$0	Pay for difference between cut and fill only (using 60% of cut)
	7	Earthwork and Grading Contingency					\$135,250	25%
General Drainage	8	Pipe Culverts, Catch Basins, etc.	1	Lump		\$257,062.00	\$257,062	
	9	Drainage Contingency					\$51,412	20%
Pavement (Reconstruct)	10	Pavement and Base	0	ft		\$40.68	\$0	Assume 3.6" superpave & 8" crushed aggregate
Pavement (24' Widening)	11	Pavement and Base	0	ft		\$29.79	\$0	Assume 3.6" superpave & 8" crushed aggregate
Pavement (22' Widening)	12	Pavement and Base	16,368	ft		\$26.74	\$437,680	Assume 3.6" superpave & 8" crushed aggregate
Pavement Rehabilitation	13	FDR w/ Foam mix	16,368	ft		\$21.11	\$345,528	Assume FDR w/ foam mix w 3% PG 58-28 PG binder and 1% cement
	13	Paving Contingency					\$109,420	25%
Structures	14	Bridge (2nd Level Concrete)	0	Each		\$30,000.00	\$0	
	15	Retaining Walls	31,043	ft ²		\$70.00	\$2,173,010	
	16	Structure Contingency					\$434,602	20%
General Utility Adjustments/Relocations	17	Adjust / Relocate Utility	1	Lump		\$26,712.50	\$26,713	Assumed percentage of overall Corridor plan Utility costs (24%)
	18	General Utility Adjustment / Relocation Contingency					\$4,007	15%
	19	Signing	1	Lump		\$9,535.60	\$9,536	
	20	Striping	16,368	ft		\$1.00	\$16,368	Assume 1-double yellow center line-6" wide
	21	Signing/Striping Contingency					\$3,886	15%
	22	Guardrail	2,204	ft		\$20.00	\$44,080	
	23	Landscaping	12	Acre		\$4,050.00	\$48,600	area between edge of pavement and cut/fill line
	24	Fencing	0	ft		\$2.60	\$0	
	25	General Other Contingency					\$13,902	15%
	31	Subtotal					\$4,700,356	
	32					10%	Mobilization	\$470,036
	33					2.5%	Traffic Control	\$117,509
	34	Traffic Control Contingency					\$17,626	15%
	35	Subtotal					\$5,305,527	
	36					10%	Design Egr.	\$530,553
	37					10%	Const. Egr.	\$530,553
SUBTOTAL	38						Subtotal	\$6,366,632
Right-of-Way	39	Administration	1	Parcel		\$5,000	\$5,000	
	40	USFS	18	Acre		\$0	\$0	
	41	Relocation (out buildings)	0	Each		\$20,000	\$0	
	42	ROW From Private Entities	0	Acre		\$25,000	\$0	Easement
	43	R/W Contingency					\$750	15%
	44	Total Roadway Elements--2006 USD					\$6,372,382	